
CASE REPORTS

COMPLEMENTARY TUBE CECOSTOMY IN THE MANAGEMENT OF STRANGULATED RIGHT RICHTER'S INGUINAL HERNIA OF THE CECUM

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Strangulated right Richter's inguinal hernia of the cecum is relatively rare. A case of this unusual hernia was successfully managed with a wedge resection and closure of the infarcted bowel wall in conjunction with complementary tube cecostomy. The procedure is easy to perform and relatively safe and is therefore recommended for use in selected cases of Richter's hernia of the cecum.

Numerous reports in the surgical literature indicate that strangulated inguinal hernia is the most common cause of acute intestinal obstruction in tropical Africa.¹⁻⁴ The morbidity associated with this condition is quite significant, and the mortality in some series is as high as 20 percent when management of the strangulated hernia includes bowel resection.^{2,3,5} The choice of operation for strangulated hernias is dependent on both the physical condition of the patient at the time of presentation and the portion of bowel wall that is infarcted. For this reason a case of strangulated right Richter's inguinal hernia of the cecum that was successfully managed with a wedge resection and closure of the infarcted wall in conjunction with complementary tube cecostomy is reported.

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CASE REPORT

A 21-year-old man was admitted to Ife University Teaching Hospital at Ife State Hospital on February 23, 1981, with a five-year history of right groin swelling that suddenly became painful and irreducible three days prior to admission. He did not move his bowels for two days and vomited several times on the day of admission. On examination, he appeared ill, dehydrated, restless, and febrile with temperature of 38.5°C. Vital signs were blood pressure 130/70 mmHg, pulse rate 120/min, and respiratory rate 38/min. The abdomen was grossly distended with rebound tenderness and hypoactive bowel sounds. A huge, non-reducible, tender, warm inguinoscrotal swelling was present in the right groin. The patient had no palpable mass in the rectum. The hematocrit was 47 percent, blood urea 72 mg/100 mL, and the serum electrolytes were normal. The plain abdominal X-ray showed dilated loops of small bowel with multiple air-fluid levels, but no free intraperitoneal air.

The clinical impression was acute intestinal obstruction secondary to strangulated right inguinoscrotal hernia. Administration of parenteral fluids and antibiotics was begun immediately. Nasogastric suction was applied and a Foley catheter inserted. The patient underwent exploration of the right inguinal region through an oblique incision, and a strangulated right indirect hernia

with infarction of the antimesenteric border of the base of the cecum (Richter's hernia) was found. The peritoneal fluid was cloudy. The incision was extended laterally and the peritoneal cavity entered. Wedge resection of the infarcted wall was performed and the defect closed. In addition, appendectomy and tube cecostomy were performed; the tube cecostomy was brought out through a separate incision in the right iliac fossa. The hernial sac was ligated, and a modified Bassini repair of the inguinal canal floor was done. The wound was closed in layers and the subcutaneous tissue drained.

The tube cecostomy functioned in the operating room as soon as the clamp on the Foley catheter was removed. The catheter was immediately attached to gravity drainage and allowed to stay open. Parenteral antibiotics were continued for seven days. He moved his bowels on the fifth postoperative day, and thereafter the cecostomy drainage tapered off. The tube was removed 23 days after surgery, and the fistula closed spontaneously two days later. The patient was discharged home five days after removal of the cecostomy tube. The clinical follow-up has been unremarkable.

DISCUSSION

Use of tube cecostomy in proximal colon decompression has led to reduction of the complications of left colon and rectosigmoid resection.⁶ A review of the literature demonstrates that other indications for tube cecostomy include proximal bowel decompression in acute large bowel obstruction secondary to cancer,^{7,8} diverticulitis,⁸ and volvulus of the cecum.⁹ These reports suggest that tube cecostomy is relatively safe and effective in decompressing the obstructed colon.

The mortality of bowel resection and anastomosis with an unprepared colon during management of strangulated inguinal hernia is quite significant.^{2,3,5} It is noteworthy that most patients with strangulated hernias who require bowel resection present late^{2,5} and are in fluid, electrolyte, and acid-base imbalance, or even in frank shock, when first seen in the hospital. In addition, these patients are at a high risk of developing anesthetic complications.

This case report demonstrates a relatively rare type of clinical condition in which part of the base

of the cecum is infarcted in a strangulated hernia. It further shows that wedge resection and closure of the infarcted wall in conjunction with complementary tube cecostomy can eliminate such complications as fistulization, anastomotic leak, intra-abdominal abscess, and wound infection arising from resection and anastomosis of unprepared bowel. The procedure takes less time than the alternative operation which is right hemicolectomy. However, it must be clearly stated that one does not advocate that tube cecostomy should replace right hemicolectomy when a large portion of the cecum is gangrenous or when the ileocecal valve is compromised. The point to be emphasized is that when possible, bowel resection and anastomosis of unprepared bowel must be avoided. The presence of a cecostomy tube effectively removes increased pressure of gas and feces in the region of repaired cecum and permits healing to proceed without suture line breakdown.

The present report highlights the use of complementary tube cecostomy in the management of strangulated Richter's inguinal hernia of the cecum without any untoward sequelae following surgery. The procedure obviates the use of prolonged general anesthesia, with its resultant complications in a sick patient operated under emergency conditions. Tube cecostomy when properly done is a simple, safe, and rapid means of decompressing the bowel and is therefore recommended for us in selected cases of right Richter's inguinal hernia of the cecum.

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